SONY®

4-482-537-42 (2)

TRINITRON® COLOR TV

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

©1987 by Sony Corporation

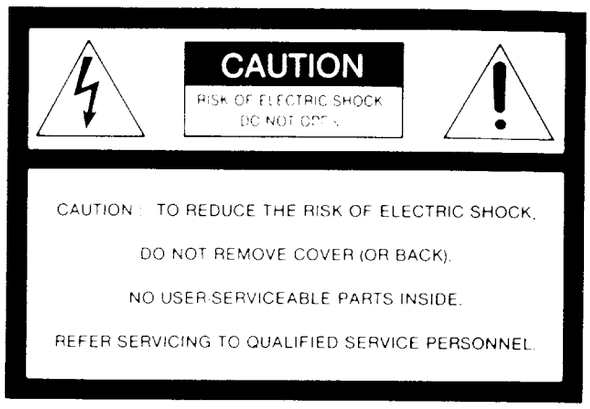
Owner's Record

The model and serial numbers are located at the rear of the unit. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer in the U.S.A.
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Contents

Before Use

Features 4
Precautions 4
Location of controls 5

Set-up

Connecting TV antenna/cable 8
Connecting other optional equipment 10
Preparing Remote Commander 11
Presetting TV channels 12

Operation

Watching TV programs 14
Timer/Block 16

General

Specifications 19
Troubleshooting 19

Features

Color monitor featuring a Microblack™ Trinitron picture tube for high resolution, high contrast picture.

- **Multi-band VHF/UHF/CATV tuner** receives up to 125 cable channels for a total of 181 possible off-air and cable channels.
- **Built-in MTS (Multichannel TV Sound) decoder** enables reception of stereo programs and Second Audio Program (SAP) broadcasts.
- **Built-in video input jacks** for better quality picture of the connected VCR or other equipment.
- **Variable audio output jacks** reproduces TV or video sound through an audio system.
- **On-screen displays**

Supplied Remote Commander provides you many other convenient features.

- **Timer/Block** for automatic program starting and channel blocking.
- **Sleep timer** automatically turns off the TV after approximately one hour.
- **Automatic programming** to preset all receivable channels instantly.
- **Jump button** to switch quickly between two channels.

And other features for high quality picture...

- **Dynamic color™ system** for superior color reproduction with natural facial color tones and dazzling whites.
- **Dynamic picture™ system** adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene.
- **Colorpure Filter™** produces fine picture detail without color spill or color noise.

Precautions

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

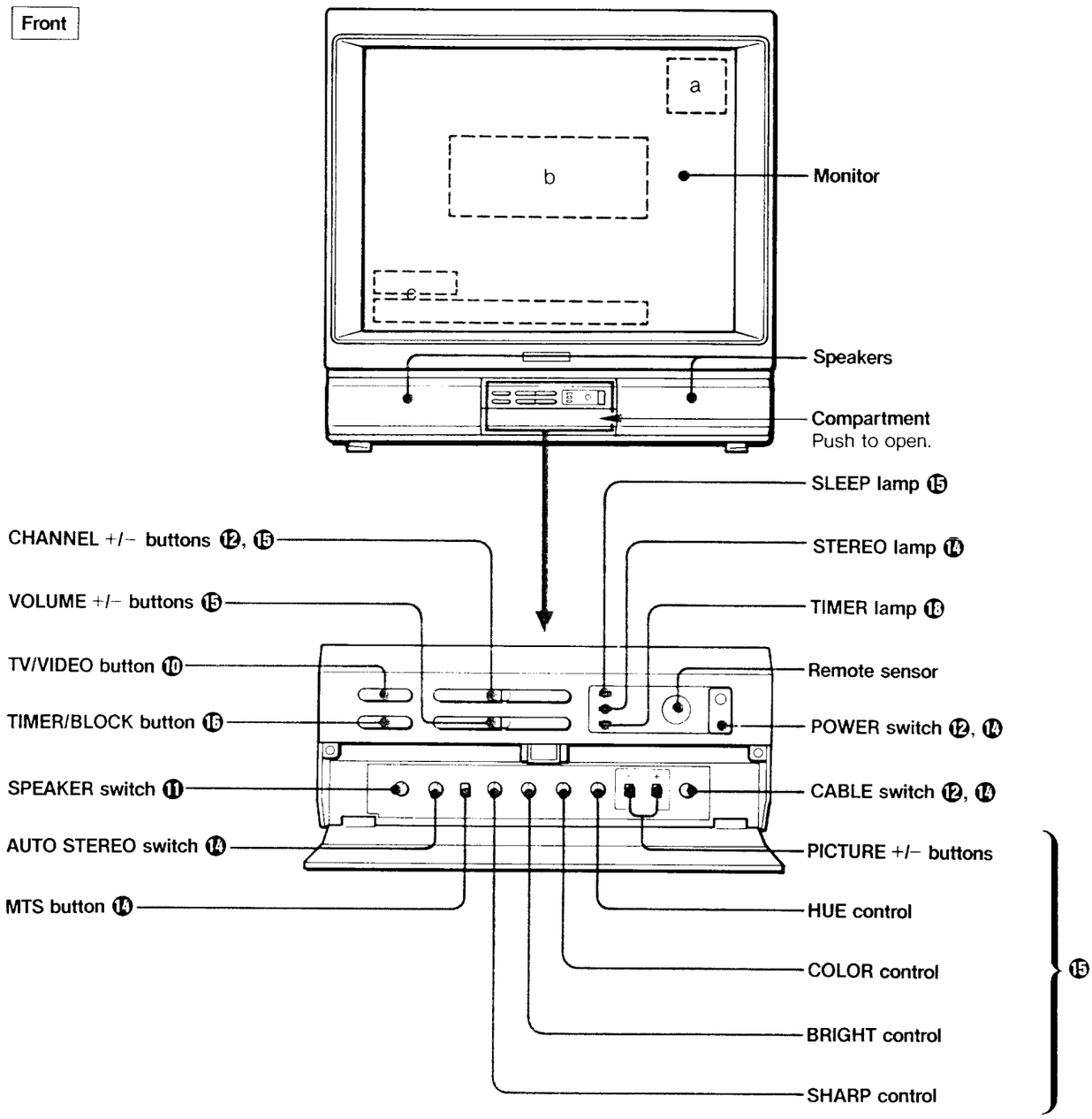
Retain the original carton and packing materials for safe transport of this unit in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Location of Controls

Refer to the page indicated in ● for details.

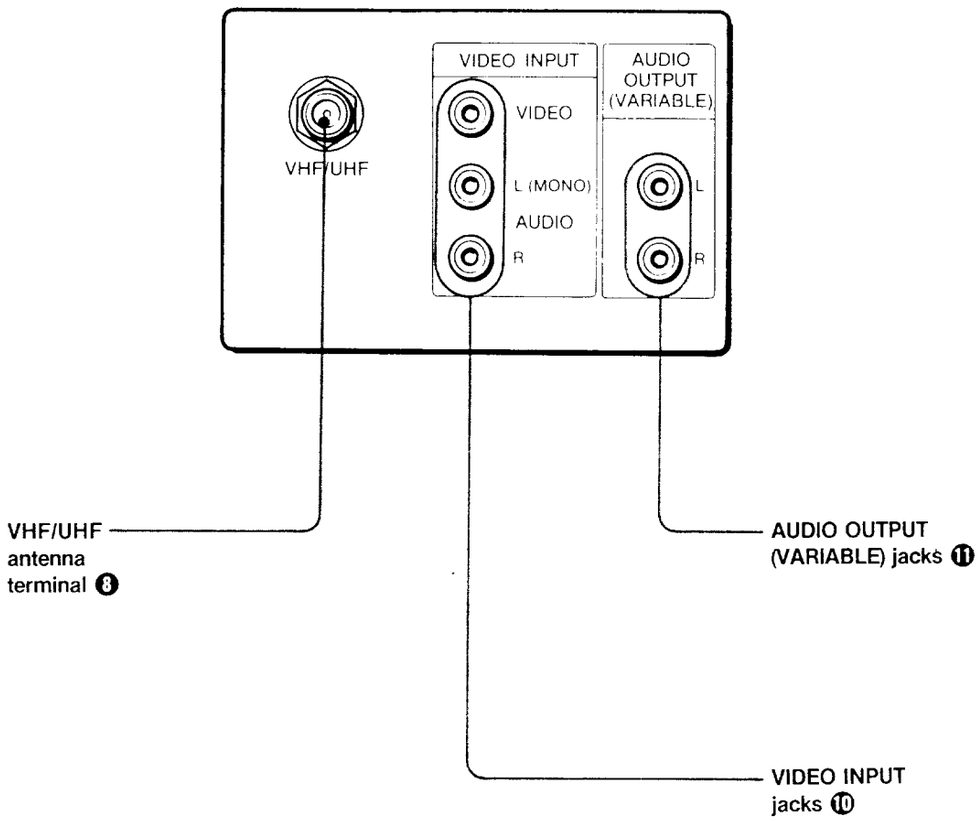
Front



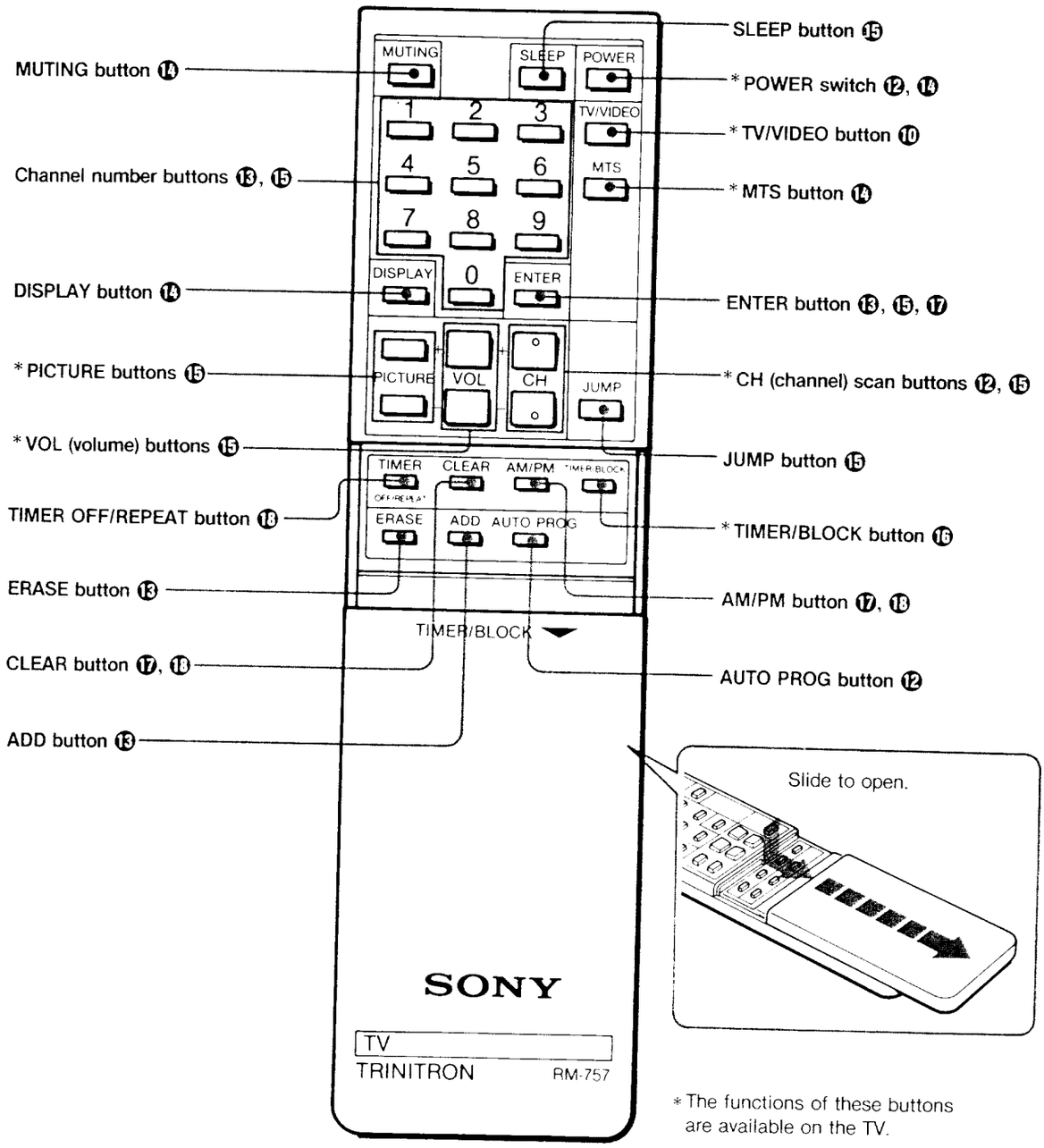
On-screen displays

a) • Channel numbers
   • MTS mode indication
   • "MUTING", "SLEEP" or "VIDEO" mode indication
b) "AUTO PROGRAM", "TIMER" or "TIMER BLOCK" indication
c) • Bar display for volume or picture adjustment
   • Current time for Timer/Block.

Rear


VIDEO INPUT
AUDIO OUTPUT (VARIABLE)
VHF/UHF
VIDEO
L (MONO)
AUDIO
R
L
R
VHF/UHF antenna terminal ❽
AUDIO OUTPUT (VARIABLE) jacks ⓫
VIDEO INPUT jacks ⓾

Remote Commander RM-757



* The functions of these buttons are available on the TV.

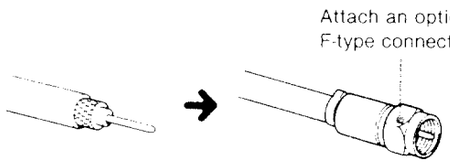
Connecting TV Antenna/Cable

If you cannot obtain satisfactory reception with an indoor antenna, use an outdoor antenna.
Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

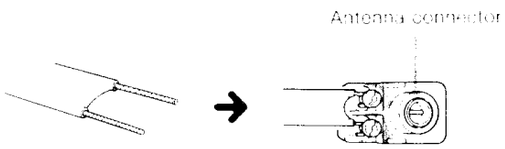
To Connect a VHF, UHF, or VHF/UHF Combination Antenna* or CATV Cable

1 Check the cable type and prepare the cable end using the appropriate connector.

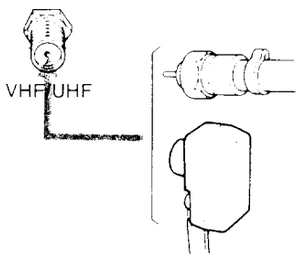
75-ohm coaxial cable (round)



300-ohm twin-lead cable (flat)

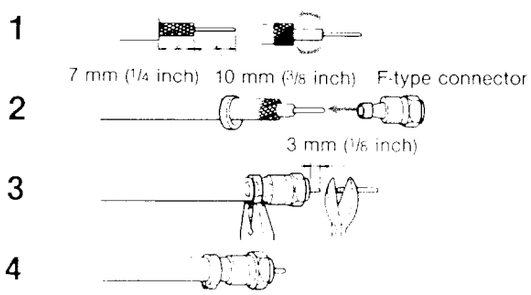


2 Plug the connector into VHF/UHF on the rear of the TV.



* Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

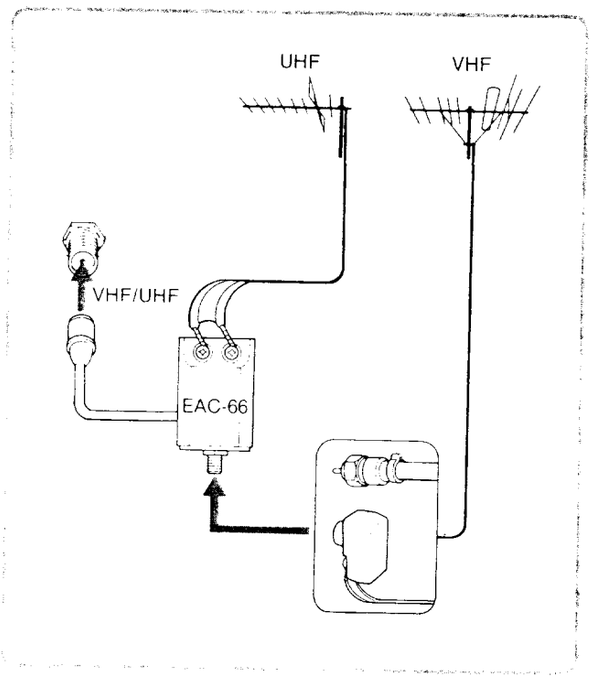
How to attach an F-type connector to the 75-ohm coaxial cable



When you connect both VHF and UHF antennas

Use the optional EAC-66 U/V mixer.

1 Prepare the VHF antenna end using the appropriate connector.
2 Connect the cables to the mixer.
3 Plug the mixer to VHF/UHF.



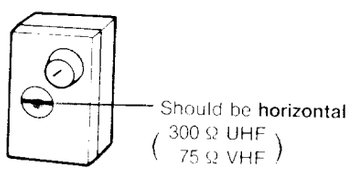
When the U/V mixer is used

Snow and noise may appear in the pictures of the cable TV channels over 37 (W+1).

If the supplied antenna connector has a slot as illustrated below:

The antenna connector can be used as a U/V mixer.

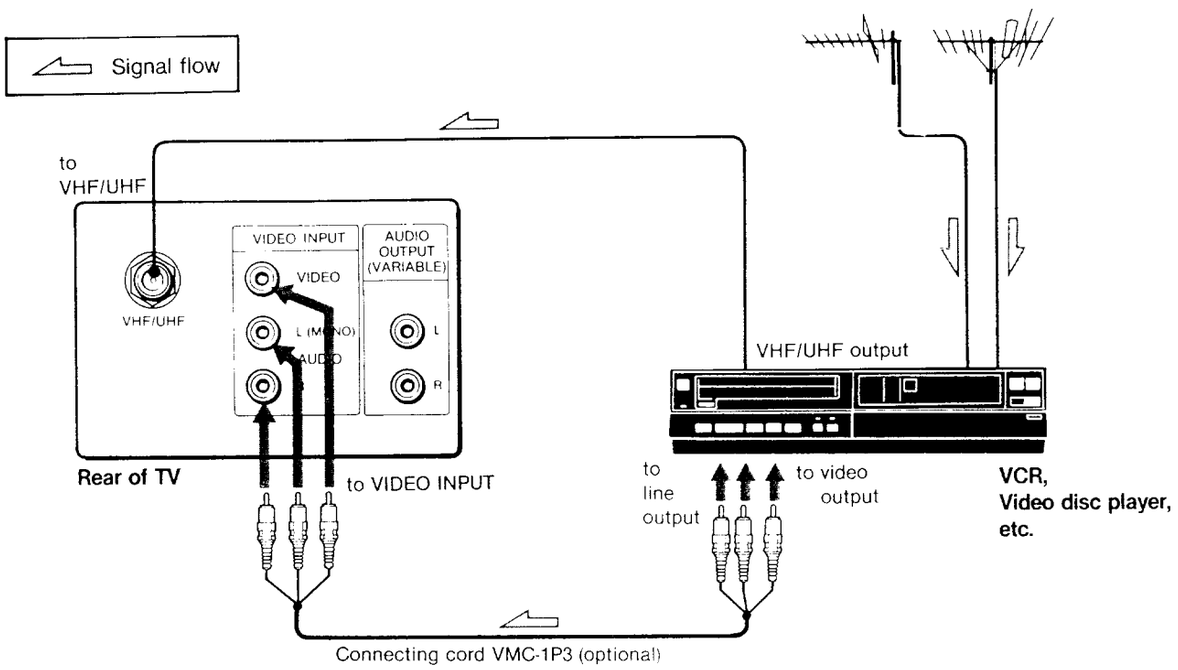
When connecting both 75-ohm VHF and 300-ohm UHF antennas, or 300-ohm UHF antenna only:



To turn the slot, use a coin or a similar object.

Connecting Other Optional Equipment

Connecting a VCR



With this connection, you will be able to...
—View the playback of video tapes
—Record TV programs
—Record a TV program while viewing another

To watch the VCR picture

1 Turn on the TV.
2 Press the TV/VIDEO button on the TV so that the "VIDEO" indication appears on the screen.
3 Set the VCR in playback mode.

To return to the TV mode

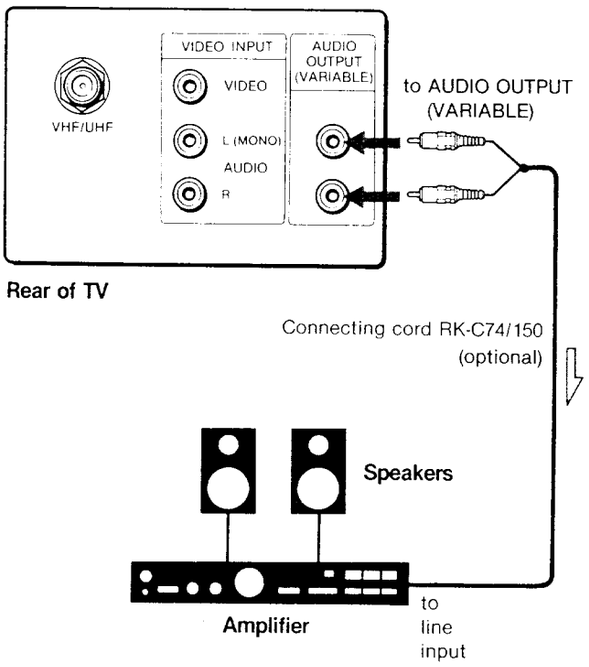
Press the TV/VIDEO button on the TV until a channel number appears on the screen.

- If you connect a monaural VCR, connect the audio output of the VCR to the L jack of the TV. The monaural sound is heard from both speakers.
- For operation, refer to the instruction manual furnished with the VCR.
- Keep the VCR away from the TV, if the picture or sound is affected.
- When no signal is fed through the VIDEO INPUT jacks even though the TV is in the video mode, "VIDEO" indication will appear on the screen.

Preparing Remote Commander

Connecting an Audio System

—To monitor the TV or connected VCR sound through an audio system

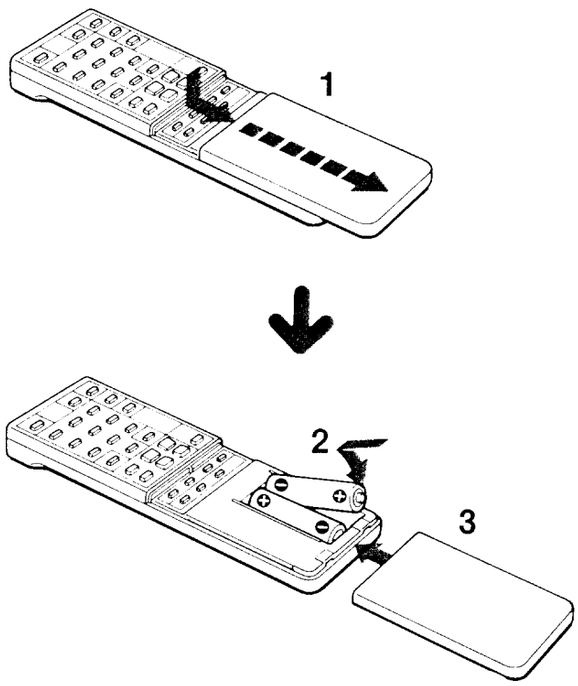


To adjust the sound level

Keep the amplifier volume, bass and treble controls to certain positions (usually at the medium position) and adjust the level with the VOLUME buttons on the TV or the VOL buttons on the Commander.

Battery installation

1 Slide the cover all the way so that the battery compartment appears, then take it off.
2 Place batteries in the Commander with correct polarity as illustrated inside the case.
3 Replace the cover.

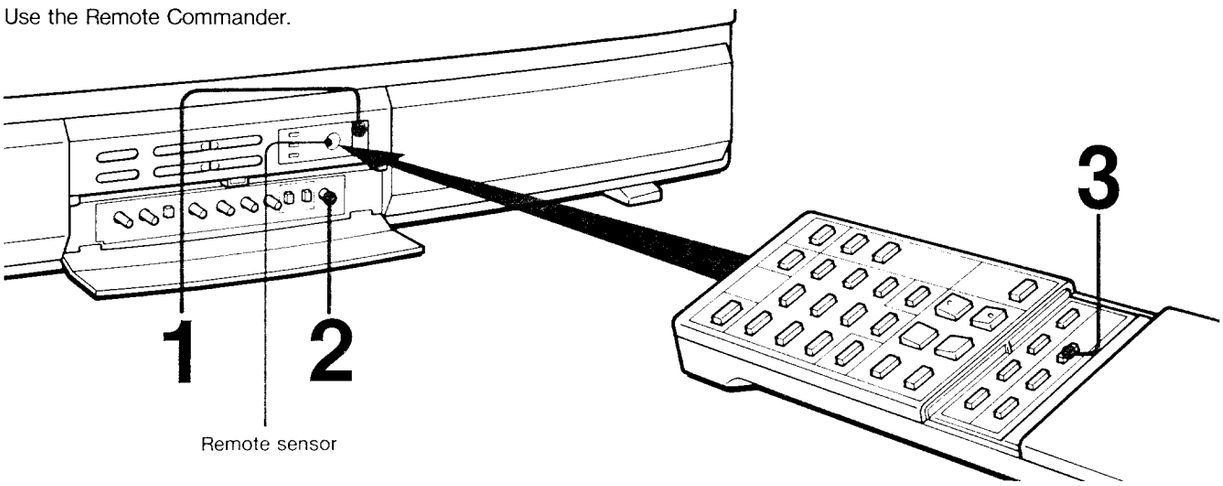


When an audio system is connected to AUDIO OUTPUT, be sure to set the SPEAKER switch on the TV to OFF. The sound from the TV's speakers will be cut off.

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace them with new ones.
- To avoid damage from possible battery leakage, remove the batteries when the Commander will not be used for a long time.
- If a Remote Commander that is not recommended is used to operate this TV, or if the supplied Remote Commander is used to operate another TV, the TV may not operate properly.

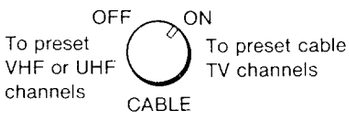
Presetting TV Channels

Use the Remote Commander.



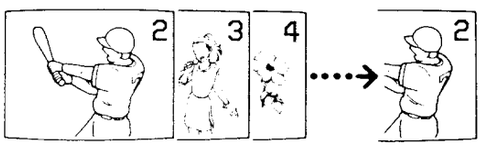
1 Turn the TV on.

2 Set CABLE to the correct position.



3 Press AUTO PROG.

"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the unit's memory.
When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

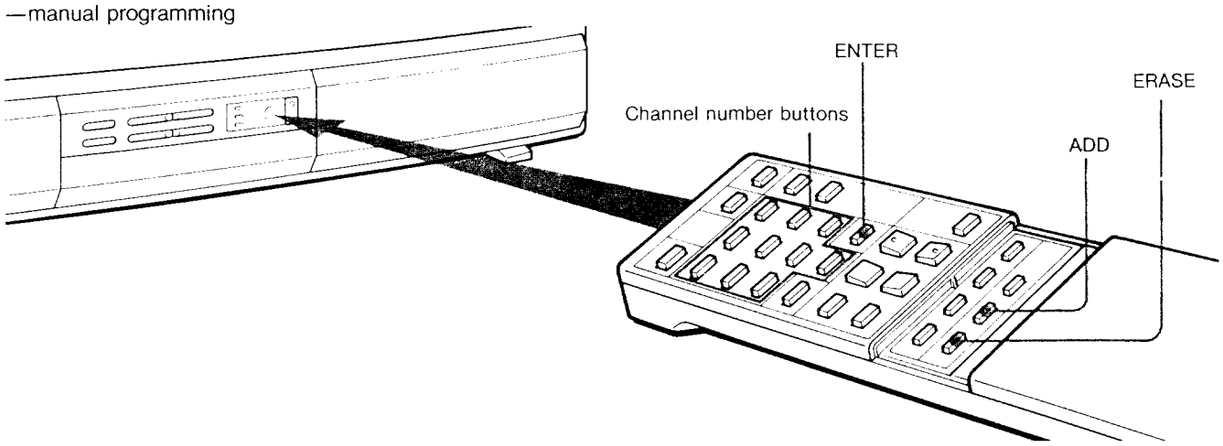


Receivable channels of this TV are:
VHF: 2-13
UHF: 14-69
Cable: 1-125

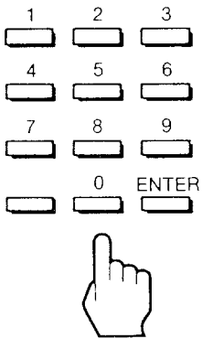
To check preset channels
Press CHANNEL +/−.

To add the channels that could not be preset with this automatic programming because their signal strength was too weak, or **to erase unnecessary channels,** follow the steps in "To preset only the desired channels" on the next page.

To preset only the desired channels
—manual programming

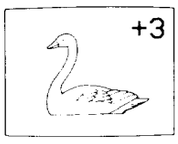


1 **Press the channel number button(s) and then ENTER to select the channel to be added.**



2 **Press ADD.**

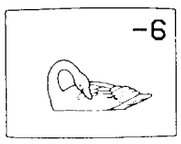
A "+" appears for a moment to the left of the on-screen channel number display. This channel has now been added to the channel scan memory.



To add other channels
Repeat steps 1 to 2.

To erase unnecessary channels

1 **Select the channel to be erased.**
2 **Press ERASE.**
A "–" appears for a moment to the left of the on-screen channel number display. This channel has now been erased from the channel scan memory.



Repeat steps 1 and 2 for other channels to be erased.

When a VHF or UHF channel is erased
The cable TV channel with the same number is also erased and vice versa.

Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Corresponding CATV channel	A-8	A-7	A-6	A-5	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q

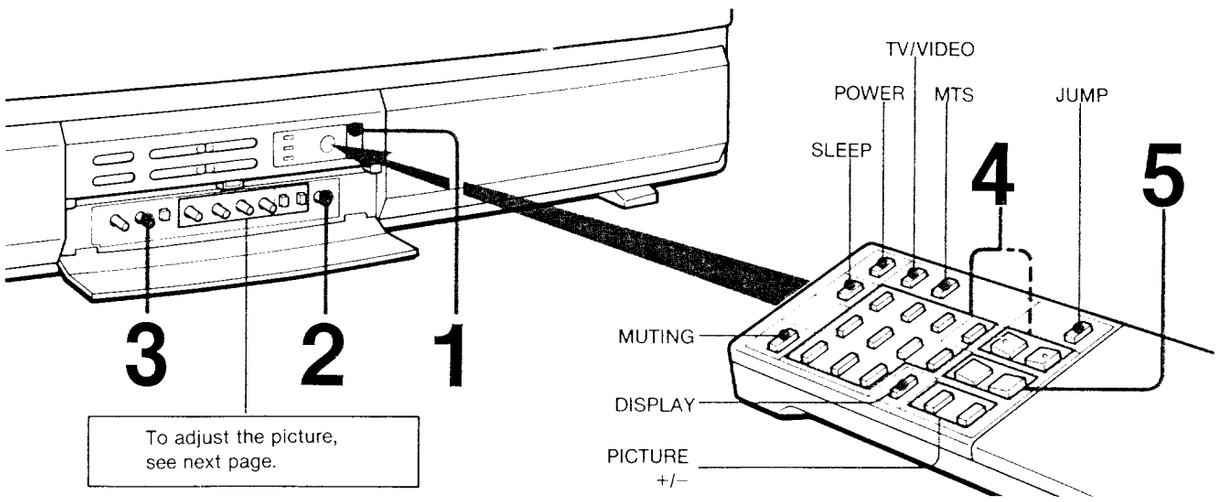
31	32	33	34	35	36	37	38	39	.....	93	94	95	96	97	98	99	100	101	102	.....	123	124	125
R	S	T	U	V	W	W+1	W-2	W+3	.....	W-57	W-58	A-5	A-4	A-3	A-2	A-1	W-59	W-60	W-61	.....	W+82	W+83	W-84

Check with your local cable TV company for more complete information on the available channels.

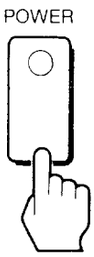
Pay cable TV systems use scrambled or encoded signals and require special converters (decorders) in addition to the normal cable connection.

* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

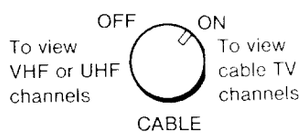
Watching TV Programs



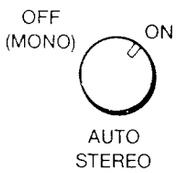
1 **Press POWER to turn the TV on.**



2 **Set CABLE to the appropriate position.**



3 **Set AUTO STEREO to ON.**



When receiving a Multichannel TV Sound program
Each time MTS is pressed, MAIN, SAP (Second Audio Program), or both are selected in sequence. The corresponding indication will appear on the screen for a while.

If noise makes it hard to receive a very weak TV stereo program
Set AUTO STEREO on the TV to OFF so that the STEREO lamp goes off.
The stereo effect will be cancelled, but reception will be stabilized and the noise will be reduced.

To mute the sound
Press MUTING. The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +/–.

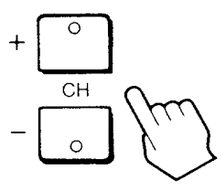
To keep the channel display on the screen
Press DISPLAY.

To adjust the picture

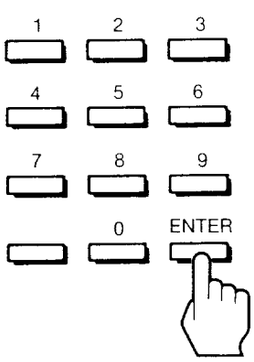
SHARP	BRIGHT	COLOR	HUE	PICTURE
for less sharpness / for more sharpness	for less brightness / for more brightness	for less color intensity / for more color intensity	skin tones become purplish / skin tones become greenish	Press to decrease picture contrast with soft color / Press to increase picture with vivid contrast color

4 Select a channel in one of the following two ways:

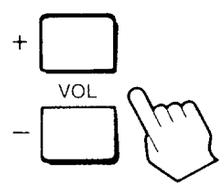
To scan the preset channels in numerical sequence, press CH +/–.



To select a channel directly, press the channel number button(s) and then ENTER. For example, to select channel 10, press 1, 0 and ENTER.



5 Press VOL + or – to adjust the volume.



To switch quickly between 2 channels
Press JUMP. Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enables you to keep track of two programs alternately.

To have the TV turn off automatically after about 1 hour
Press SLEEP. The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off.

To cancel the SLEEP timer, press SLEEP again so that the SLEEP lamp goes out, or turn off the TV.

To turn off the system
Press POWER again.

Timer/Block

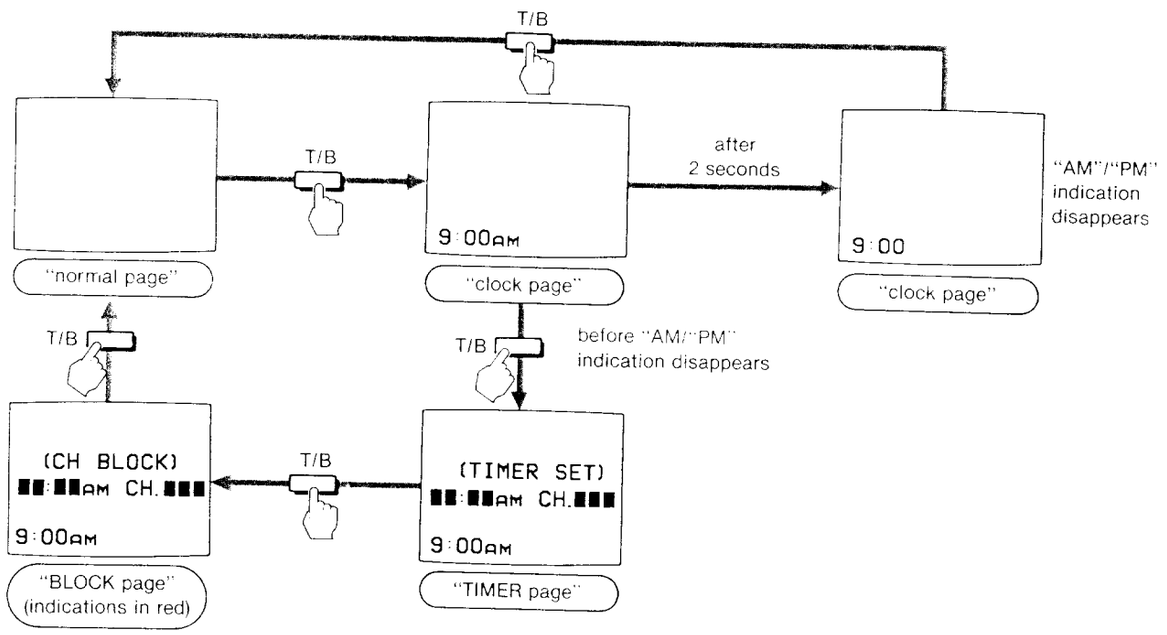
Available functions

Internal clock	Once the internal clock is set, the current time will appear on the screen. It is necessary to set the clock correctly to activate the program start TIMER and channel BLOCK.
Program start TIMER	Makes a program of your choice appear on the screen automatically at the desired time.
Channel BLOCK	Blocks a channel from appearing on the screen for 12 hours. Use channel BLOCK to prevent children from watching undesirable programs.

The buttons used for the above functions are located on the Remote Commander.

To set the internal clock, program start TIMER and channel BLOCK, you must summon the corresponding "pages": "clock page," "TIMER page" and "BLOCK page."

To change the "pages," press TIMER/BLOCK.
T/B stands for the TIMER/BLOCK button.

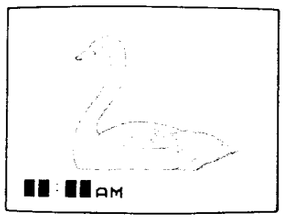


- All settings will be erased from the unit's memory if the unit is unplugged, or if a power failure occurs.
- The TIMER and BLOCK will operate only if the clock is set correctly.
- If the TIMER and BLOCK are set for overlapping times on the same channel, the blocked channel will appear on the screen at the time set on the TIMER.

How to Set the Internal Clock

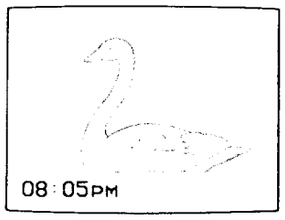
Example: To set the clock to 8:05 PM

1 Press TIMER/BLOCK once to change from "normal page" to "clock page."

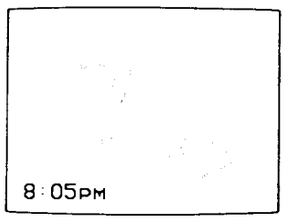


"clock page"

2 Press 0, 8, 0, 5, AM/PM (0 necessary).



3 If you have performed the operation correctly, press ENTER.
The numbers will "wink" to indicate that the clock has been set. (The 0 in front will disappear.)



If you have made a mistake, press CLEAR and return to step 2.

The "AM/PM" indication will disappear after 2 seconds.

To summon "TIMER page," press TIMER/BLOCK before the "AM"/"PM" indication disappears.
To return to "normal page," press TIMER/BLOCK after the "AM"/"PM" indication has disappeared.

To reset the clock, summon "clock page" and press CLEAR before the "AM"/"PM" indication disappears. Then follow the steps above from step 2.

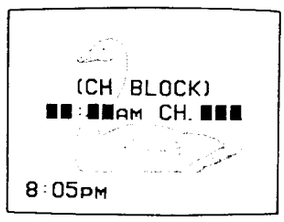
12:00 AM stands for midnight.
12:00 PM stands for noon.

How to Set the Channel BLOCK

Make sure that the clock has been set correctly before setting the channel BLOCK.

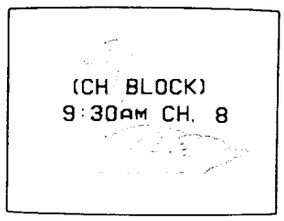
Example: To set the BLOCK for a program which begins at 9:30 AM on channel 8

1 Press TIMER/BLOCK three times to change from "normal page" to "BLOCK page."



"BLOCK page"
(indications in red)

2 Press 0, 9, 3, 0, ENTER (0 necessary).
Numbers will "wink" to indicate that the time has been set.
Press 8, ENTER (0 not necessary).
Numbers will "wink" to indicate that the channel has been set.



The BLOCK has now been set.
If you have made a mistake, press CLEAR and return to step 2.

At the preset time, the picture of the selected channel will be blocked from view and the sound will be muted. A red "BLOCKED" indication will appear on the screen while the channel is blocked.
Normal reception will be resumed after 12 hours.

To return to normal reception while the channel is blocked, recall "BLOCK page" and press CLEAR.

The BLOCK setting blocks a specified channel for the same 12-hour period everyday.

To clear BLOCK setting, summon "BLOCK page" and press CLEAR.
To reset, clear the setting and follow the steps above from step 2.

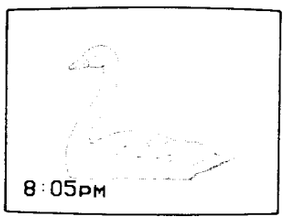
Timer Block

How to Set the Program Start TIMER

Make sure that the clock has been set correctly before setting the program start TIMER.

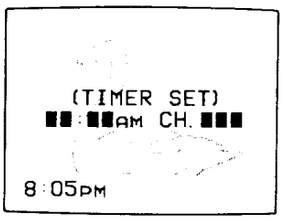
Example: To set the TIMER for a program which begins at 10:30 PM on channel 12

1 Press TIMER/BLOCK once to change from "normal page" to "clock page."



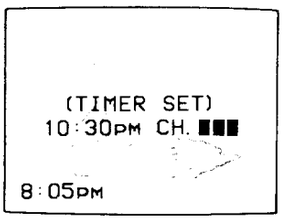
"clock page"

2 Press TIMER/BLOCK before the "AM"/"PM" indication disappears and summon "TIMER page."

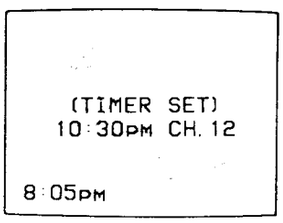


"TIMER page"

3 Press 1, 0, 3, 0, AM/PM, ENTER.
Numbers will "wink" to indicate that the time has been set.



4 Press 1, 2, ENTER (0 not necessary).
Numbers will "wink" to indicate that the channel has been set.



The TIMER lamp will light up to indicate that the TIMER has been set.
If you have made a mistake, press CLEAR and return to step 3.

At the preset time, the selected channel will appear on the screen and the TIMER lamp will go out. The TIMER will operate whether you are watching a TV program or a VCR playback, or even if you have turned off the TV.

If no button is pressed within 2 hours after the preset time, an "OFF" indication will appear on the screen for 1 minute. If a button is still not touched during the 1 minute, the TV will turn off automatically as a safety precaution.

The TIMER operates only once, but the time and the channel will remain in the unit's memory.
If you want to preset the same channel at the same time for a future date, press TIMER OFF/REPEAT. The TIMER lamp will light up to indicate that the TIMER has been reactivated.

If you want to deactivate the TIMER, press TIMER OFF/REPEAT again so that the TIMER lamp goes out .
It is not necessary to summon "TIMER page" to use the TIMER OFF/REPEAT button. Furthermore, this button is effective even if the TV has been turned off.

To clear the TIMER setting, summon "TIMER page" and press CLEAR.
To reset, clear the setting and follow the steps from step 3.

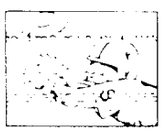
Specifications

Television system	American TV standards
Channel coverage	VHF: 2–13 UHF: 14–69 Cable TV: 1–125
Picture tube	Microblack Trinitron tube **27-inch picture measured diagonally** 28-inch picture tube measured diagonally
Input	VIDEO INPUT (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 500 mVrms (100% modulation) Impedance: 47 kilohms
Output	AUDIO OUTPUT (VARIABLE) (phono jacks) More than 408 mVrms at the maximum volume setting (variable) (100% modulation) Impedance: 10 kilohms
Power requirements	120 V AC, 60 Hz
Power consumption	160W (max.) 5W (in standby condition)
Accessories supplied	Remote Commander RM-757 with 2 size AA EVEREADY batteries.
Optional accessories	U/V mixer EAC-66 Connecting cord VMC-810/820S RK-C74/150

Design and specifications subject to change without notice.

Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

	SYMPTOM	CHECK AND ADJUST
GENERAL	**Poor or no picture (screen not lit), good sound**	• Adjust PICTURE. • Adjust BRIGHT. • Check antenna/cable connections.
	Good picture, no sound	• Press VOLUME +. • Release MUTING on the Remote Commander. • Check that the MTS button is set correctly. • Check that the TV/VIDEO button is set correctly. • Set the SPEAKER switch to ON.
	No picture (screen not lit), no sound	• Is POWER switched on? Power in outlet? • Check that the TV/VIDEO button is set correctly.
	No color	• Is it a color program? • Adjust COLOR.
	Snow and noise only	• Is it an active or the correct channel? • Check the CABLE selector setting. • Check antenna/cable connections.
	 **Dotted lines or stripes**	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust antenna for minimum interference.
	Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.
	Try another channel. It could be station trouble.	
TIMER/BLOCK	**Program start TIMER and/or channel BLOCK does not operate properly.**	• Is the clock set correctly? • Is the setting correct? • Have you unplugged the unit? Has a power failure occurred? If so, the settings have been erased.

If the problem persists, contact your nearest service facility.